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EXAMINER

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ART UNIT	PAPER NUMBER
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2176

DATE MAILED:

04/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/322,720

Applicant(s)

LYNESS, STANLEY W.

Examiner

Cong-Lac Huynh

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 and 26-48 is/are rejected.
- 7) ☒ Claim(s) 23, 25 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to communications: amendment filed on 01/19/01 to the application filed on 05/28/99.
2. Claims 14 and 29 are canceled.
3. Claims 1-13, 15-28, 30-48 are pending in the case. Claims 1, 6, 9, 12, 15, 18, 26, 27, 32, 34, 37, 48 are independent claims.
4. The objection of claims 13 and 14 as being duplicate claims has been withdrawn in view of cancellation of claim 14.
5. The rejections of claims 1-3 under 35 U.S.C. 112, first paragraph, as being enabled have been withdrawn in view of the amendment.
6. The rejection of claims 2-4 under 35 U.S.C. 112, second paragraph, as being indefinite have been withdrawn in view of the amendment.
7. The rejections of claims 32-35, and 48 under 35 U.S.C. 102 (b) as being anticipated by Dolan have been withdrawn in view of the amendment.
8. The rejections of claims 6-7, 15-17 under 35 U.S.C. 102 (b) as being anticipated by Theisen have been withdrawn in view of amendment.

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Art Unit: 2176

10. Claims 32-47 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A web page, a web browser, a user interface are non-statutory subject matters.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claim 36 remains rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As argued by applicants, "claim 36 itself discloses the feature that it claims as permitted by law."

Examiner has no idea about the law permitting for claiming the feature which is not disclosed in the specification.

Claim 36 remains rejected as in previous office action.

Regarding claim 36, the feature of a user interface window for navigation of a hierarchy of nodes that occupies less than 25% of the web page is not disclosed in the specification.

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2176

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 1, 8, 15-17, 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, it is confusing why a same position in a space is identified by two ways:

One is by a *node level value* identifying the node's level in the hierarchy, and a *node-in-level value* identifying the node's location uniquely among nodes in that level.

The other is by a *depth value* comprising a *node level value* and an offset from that node level value, and a *position-in-level value* comprising a *node-in-level value* and an offset from the node-in-level value.

Regarding claim 8, it is confusing that *within a band*, the area is divided so that the subarea allocated to a parent node *has the same extent along the band as the sum of the extents of the subareas in the adjacent band* that are allocated to the children of the parent node. Please explain.

Claims 15-17 remain rejected.

Claim 17 is amended by adding "and releasing." As defined by the claims, the first type of action is dragging, and the second type of action comprises clicking and releasing. It

Art Unit: 2176

is not reasonable since users can not drag an object without clicking on the object first.

That feature is stated in the specification (page 28, lines 28-29).

Therefore, a user can not navigate in the displayed representation of the portion of the hierarchy by the first type of user-interface action, which is *dragging*, and allowing the selection of any currently represented node by a second type of user-interface action, which are *clicking and releasing as claimed*.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 1-8, 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theisen et al. (US Pat No. 5,877,775, 3/2/99, filed 8/6/97).

Regarding independent claim 1, Theisen discloses:

- identifying a position in a space associated with a hierarchy of nodes, *the hierarchy comprising levels and locations within the levels*, the space having at least two dimensions, each node being uniquely identifiable within the space (figure 3; col 4, lines 47-60)

Art Unit: 2176

- each node being uniquely *identifiable by a node level value identifying the node's level in the hierarchy and a node-in-level value identifying the node's location uniquely among nodes in that level* (col 4, lines 47-62)
- the position in the space being identified by a depth value comprising a node level value and an offset from that node level value (col 4, lines 47-58)

Theisen does not disclose a position-in-level value comprising a node-in-level value and an offset from the node-in-level value. However, since Theisen discloses that the X and Y displacement values determines *the distance, and relative offset, between adjacent levels of nodes* (col 4, lines 56-58), and the X, Y, Z coordinates, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have included the position-in-level value comprising *a node-in-level value and an offset from the node-in-level value*. The node-in-level value and an offset from the node-in-level value are merely values in the Z axis for nodes in a same level.

Regarding claims 2-3, which are dependent on claim 1, Theisen does not disclose the depth value *offset comprising a non-integral number*. However, since the position of a node in the hierarchy is based on the X, Y, and Z coordinates, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have recognized that the depth value offset belong to X, Y, Z coordinates comprises a non-integral number.

Art Unit: 2176

Regarding claim 4, which is dependent on claim 3, as disclosed in claim 3, the node-in-level value is a non-integral number, which is a floating-point number.

Regarding claim 5, which is dependent on claim 1, Theisen discloses the using of the position *in the space* to identify a focus of a user's view of a hierarchy (the hierarchy structure can be expanded or collapsed upon user's selection (figures 10A-B, 11A-B, 13; col 6, lines 44-67).

Regarding independent 6 and claim 7, Theisen discloses:

- *dividing area on the display into subareas* (figure 3, objects are displayed in different level areas)
- *allocating nodes of a hierarchy of nodes respectively to each of the subareas* (figure 3, each subarea of each level includes nodes of the hierarchy at various positions)
- *displaying, in the area, a node representation for each allocated node, the node representation occupying the entire subarea to which the node is allocated* (figure 11A)
- the nodes in the hierarchy are organized in levels and at least some of the nodes of one level are fully represented in a direction of the display that corresponds to different levels and at least some of the nodes of levels of the hierarchy above and below the one level that are at least partially represented (figure 3)

Theisen does not disclose "receiving an indication of an action to be taken, the indication being received made at any arbitrary position within the subarea".

Art Unit: 2176

However, as disclosed in the specification of the invention, the user *triggers the action associated with a displayed node* of the hierarchy by invoking the node using the second type of action (page 4, lines 28-31). In Theisen figure 9, item 194 and 196, when user clicks on a container, tree highlighting action is taken on the tree below the container, the action is made at any arbitrary position within the subarea. In figure 12A, item 224 shows that when user clicks on a container, the animation starts. Since the action is taken on a displayed node, which is equivalent to a stick or a container in Theisen, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Theisen to include receiving ~~an~~ indication of an action at any arbitrary position within the subarea since the stick or container position can be an arbitrary position.

Regarding claim 8, which is dependent on claim 7, Theisen discloses:

- each of the levels is represented as a band of node representations in the area, nodes represented in one band have a parent-child relationship with nodes represented in an adjacent band (figures 1, 3)
- within a band, the area is divided so that the subarea allocated to a parent node has the same extent along the band as the sum of the extents of the subareas in the adjacent band that are allocated to the children of the parent node (figure 3)

Regarding independent claim 15 and dependent claims 16 and 17, Theisen discloses:

Art Unit: 2176

- displaying a representation of a portion of a hierarchy of nodes to a user (figures 7A-B)
- enabling a user to navigate in the displayed representation of the portion of the hierarchy by a type of *user-interface* action, which is clicking, and *allowing, by a type of user-interface action the selection of any currently represented node*, which is dragging (figure 15, user clicks and drags on container label; col 8, lines 22-27)
- *reporting each selected node to an application to invoke node-specific behavior in the application, the node specific application being other than generating a representation of the hierarchy, and the application being other than the graphical user interface used to represent the hierarchy* (figure 14B, step 328, *calculate position of stick* at the point that its label would be visible, which is a node-specific behavior in the application being other than generating a representation of a hierarchy)
- enabling a user to trigger the action associated with a displayed node of the hierarchy by invoking the node using a type of action, which is dragging (figure 15, user clicks and drags on container label; col 8, lines 22-27)

Theisen does not disclose a second type of action comprising releasing. However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have known that actions such as clicking and dragging are always accompanied with releasing action to complete a dragging action.

Art Unit: 2176

17. Claims 9-11, 26-31, 36-42, 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dolan et al. (US Pat No. 5,801,702, 9/1/98, filed 3/9/95).

Regarding independent claim 9, Dolan discloses for a node in a hierarchy of nodes:

- rendering a container associated with the node and a representation of information associated with the node, the container having dimensions that change with an amount of space dynamically allocated to the node based on a changing focus in the hierarchy (figures 2, 8B-C, 11A-C)
- drawing the container and the representation on a display (figures 1-2) , and when the focus changes,
- re-rendering the container with updated dimensions and drawing the container on the display (figures 11A-C)

Dolan does not explicitly disclose the copying the rendered representation to a new location without re-rendering.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have recognized that the copying of the rendered representation to a new location is merely the same as the re-rendering of the representation when the focus changes.

Regarding claims 10 and 11, which are dependent on claim 9, Dolan discloses that the drawn container indicates the node's position in the hierarchy, its relationship to nearby nodes and the representation including graphics or text or both (figure 2).

Regarding independent claim 26, Dolan discloses:

- displaying information about a portion of a hierarchy of nodes, *the portion changing as a focus position changes* (figures 8A-B, in figure 8A, book icon Bicycles is open, so Recreational Bicycling, Racing Bicycles, and Mountain Bicycles are shown; the portion is changed when the Mountain Bicycles icon is open as in figure 8B)
- *as a result of no user interaction other than navigation*, information about *portions* of the hierarchy that are approaching view (figures 8A-B)
- *representing each node as the displayed portion of the hierarchy changes to include the node* (figures 8A-B)

Dolan does not disclose *including information not previously fetched about child nodes of currently displayed nodes*.

When clicking on a particular book icon, a user wants to find files and display files *retrieved* under that category, such action is a navigation. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have recognized that the information of the child node, as a result of such user's navigation, are *fetched* before displaying to a user (figures 8A-C).

Regarding independent claim 27 and claim 28, Dolan discloses:

- providing to the client *information about only* a portion but not all of the hierarchy, the portion *including references to information about* other portions of the hierarchy in response to user request (figure 8B-C)

- each of the portions comprises a sub-hierarchy *of the hierarchy* (figures 8A-C)

Dolan does not explicitly disclose the receiving at a server a request from a client for a hierarchy definition. Instead Dolan discloses that user can access an item, which can include files and directories, over the Internet by merely selecting said item from the graphical representation (col 3, lines 10-45).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have employed Dolan since users have to request at the server to access items over the Internet represented by a hierarchy of links (or nodes).

Dolan does not disclose determining the size of the portion of the hierarchy to be provided to the client adaptively based on parameters for optimizing communication between the server and the client.

However, Dolan does show the links to the nodes in the hierarchy (figures 8A-C, 11A-C). It was obvious that the size of the displayed portion in the hierarchy depends on the number of links to a specific node. Therefore, it would have been obvious to an ordinary skill at the time of the invention was made to have recognized that determining the size of the portion to be provided to the client based various parameters for various user's selection should be included in Dolan before displaying to users. Such user's selection is a communication between the server and the client as claimed.

Art Unit: 2176

Regarding claims 30-31, which are dependent on claim 27, Dolan discloses the hierarchy and the sub-hierarchy and includes them with definitions of nodes (col 5, lines 24-49).

Regarding claim 36, which is dependent on claim 34, Dolan discloses that a user interface window permitting continuous navigation of a hierarchy of nodes occupies a portion of the web page (figure 1).

Regarding independent claim 37, Dolan discloses a *process* that permits *continuous navigation* of a hierarchy of *nodes* and *selection of any nodes currently displayed* (the navigation graph includes icons and associated descriptions connected so as to represent inter-relations of a hierarchical structure and allows users to select desired information (figure 2; col 5, lines 24-63)).

Dolan does not use the same terminology "non-discrete."

Since nodes and linked nodes in the hierarchy are *connected*, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have recognized that Dolan includes the feature of *non-discrete navigation* as claimed.

Regarding claims 38-39, which are dependent on claim 37, Dolan discloses:

- the hierarchy comprises a hierarchy function menu (figure 8)
- the hierarchy comprises a hierarchical file system (figure 2)

Art Unit: 2176

Regarding claim 40, Dolan discloses that the hierarchy comprises a document encoded in HTML (col 2, lines 31-67; col 14, lines 10-24). Dolan does not disclose that the document is encoded in XML.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have included XML in Dolan to facilitate the writing of a web page in which web designers have more chances to create their own tags for the page.

Regarding claims 41-42, 44-46, Dolan discloses:

- the hierarchy index constructed from a document, list or table (figure 2)
- the hierarchy comprises an encoded hierarchy (figure 2)
- the hierarchy comprises categorized products (figure 8C)
- the hierarchy comprises characters belonging to a character set to be selected for text entry (figures 8A-C)

Dolan does not disclose that the hierarchy comprises postal addresses or other location by geographic region. Instead Dolan discloses email which has email address.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have included the postal addresses into Dolan. Dolan has email with email addresses thus motivating the including postal addresses to give more information about an agent or a person related to the web page and the hierarchy.

Art Unit: 2176

Regarding claim 47, which is dependent on claim 37, Dolan discloses that the hierarchy comprises a corpus which is not hierarchical (figure 8B, "rear suspension" in the hierarchy is not hierarchical since it does not included any sub-directories).

18. Claims 32-35 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dolan et al. (US Pat No. 5,801,702, 9/1/98, filed 3/9/95).

Regarding independent claim 32 and claim 33, Dolan discloses:

- an area that provides a navigational interface that permits continuous navigation of a hierarchy of nodes (figure 1)
- said nodes comprises links to other web pages (figures 1-2)

Dolan does not disclose based on a user's continuous activation of a user interface device, *the interface displaying information about a portion that is less than all of the hierarchy at one time*, the portion changing apparently continuously in response to the user's continuous activation of the user interface device.

However, Dolan does teach the expanding of the hierarchy when a user clicks on subfolders to display the files in the subfolder (figures 8A-C).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have utilized Dolan to obtain the claimed feature since it was well known that a user can click on the main folder to close the main folder and to collapse the hierarchy, then the *interface displaying information about a portion that is less than all of*

Art Unit: 2176

the hierarchy at one time, the portion changing apparently continuously in response to the user's continuous activation of the user interface device.

Independent claim 34 and claim 35 are the web browser of claims 32-33, and therefore are rejected under the same rationale.

Regarding independent claim 48, Dolan discloses:

- displaying a portion that is less than all of a hierarchy at a browser (figure 1)
- enabling a user to navigate continuously through levels and nodes of the hierarchy (figure 2)
- delivering portions of the hierarchy from a remote server to the browser in time to enable the continuous navigation during navigation (figures 8A-C)

Dolan does not disclose *based on a user's continuous activation of a user interface device, the interface displaying information about a portion that is less than all of the hierarchy at one time*, the portion changing apparently continuously in response to the user's continuous activation of the user interface device.

However, Dolan does teach the expanding of the hierarchy when a user clicks on a subfolder to display the files in the subfolder (figures 8A-C).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have utilized Dolan to obtain the claimed feature since it was well known that a user can click on the main folder to close the main folder and to collapse the hierarchy, then the *interface displaying information about a portion that is less than all of*

Art Unit: 2176

the hierarchy at one time, the portion changing apparently continuously in response to the user's continuous activation of the user interface device.

19. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dolan as applied to claim 37 above, and further in view of Guck (US Pat No. 5,794,039, 8/11/98, filed 12/18/96).

Regarding claim 43, which is dependent on claim 37, Dolan does not disclose explicitly the using of the Dewey Decimal number applied in the hierarchy (figure 10). Guck discloses the using of the Dewey Decimal number, which is an extension of an integer for organizing email messages (col 11, lines 30-55; col 1, lines 55-62).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Guck into Dolan to facilitate in organizing of the hierarchy of any size by applying the Dewey Decimal system into the hierarchy.

20. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotchey (US Pat No. 5,812,135, 9/22/98, filed 11/5/96).

Regarding independent claim 12, Kotchey discloses:

- receiving information indicating a displacement of a user input device within a two-dimensional frame of reference (user selects a particular node, col 3, lines 36-67; col 4, lines 1-6; figures 2, 7; col 5, lines 1-38)

Art Unit: 2176

- translating displacement in at least one of the dimensions to a rate of change of a hierarchy position used to identify a focus of a user's view of the hierarchy (figures 1-7; col 3, lines 36-67)

Kotchey does not explicitly disclose the rate of change of a hierarchy position used to identify a focus of a user's view of the hierarchy.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have included that feature into Kotchey. The fact that Kotchey shows the change of the focus to display different partial views of the hierarchy implies that the changes of different views are recorded.

Regarding claim 13, which is dependent on claim 12, Kotchey discloses that one dimension represents a depth in the hierarchy, and the other dimension represents position-within-level (figures 1-2).

21. Claims 18-22, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seidensticker, Jr. et al. (US Pat No. 6,108,784, 8/22/00, filed 4/3/97).

Regarding independent claim 18, Seidensticker discloses:

- displaying a representation of a portion of a hierarchy of nodes (figure 1)
- providing an emulation of an input device for enabling a user to navigate the hierarchy (figure 1)

Art Unit: 2176

- treating the user's manipulation as a manipulation of the input device in response to the user manipulating an input device for navigating the hierarchy (figure 1, col 3, lines 33-54; col 4, lines 40-62)

Seidensticker does not disclose explicitly that the input device is a return-to-center input device. However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have included a return-to-center input device to Seidensticker to enhance the manipulation of navigating a hierarchy.

Also, since in Seidensticker, the keypad in the user interface *imitates the real keypad* which is an input device for controlling the display, and such interface is programmed by a software, the keypad is a *software emulation* of an input device as claimed.

Regarding claim 19, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have recognized that the input device comprises a computer mouse.

Regarding claim 20, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have included a joystick in the input device since the joystick was well-known as an input device for games on the computer video.

Regarding claim 21, Seidensticker discloses the emulation includes rendering the device on the display (figure 1).

Art Unit: 2176

Regarding claim 22, Seidensticker discloses that the focus position in the hierarchy changes in response to user manipulation (col 3, lines 34-54; col 4, lines 41-62).

Regarding claim 24, Seidensticker discloses that the user manipulating enables the user to view a large hierarchy of nodes (col 4, lines 10-50).

Allowable Subject Matter

22. Claims 23 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

23. Applicant's arguments filed 1/19/01 have been fully considered but they are not persuasive.

Regarding claims 6-7, applicants argue that Theisen does not disclose "receiving an indication of an action to be taken, the indication being received made at any arbitrary position within the subarea" as amended. Also, the spaces between the sticks cannot receive any indication of an action to be taken because Theisen only receives indications at sticks and container and not at the space between them.

Examiner disagrees. Theisen does teach receiving indications at sticks and container, which can be one of arbitrary positions. As disclosed in the specification, the user

triggers the action associated with a displayed node of the hierarchy by invoking the node using the second type of action (page 4, lines 28-31). Since the action is taken on a displayed node, which is equivalent to a stick or a container in Theisen, Theisen does teach that subject matter.

Regarding claims 15 and dependent claims 16-17, applicants argue that Theisen does not disclose or suggest an action other than generating a representation of the hierarchy, and an application being other than the graphical user interface used to represent the hierarchy.

Examiner disagrees. Theisen discloses invoking calculate position of stick at the point that its label would be visible (figure 14B, step 328), which is a node-specific behavior in the application being other than generating a representation of a hierarchy.

Regarding claims 32, 34, and 48, applicants argue that Dolan does not disclose “based on a user’s continuous activation of a user interface device, the interface displaying information about a portion that is less than all of the hierarchy at one time, the portion changing apparently continuously in response to the user’s continuous activation of the user interface device.

Examiner agrees. However, Dolan does teach that expanding feature to expand a hierarchy in figures 8A-C. It was well known that a user can collapse a hierarchy by clicking on the main folder to close all of the folders. Then, the interface displaying information about a portion that is *less than all of the hierarchy* at one time as claimed.

Regarding claims 1-5, applicants argue that Theisen does not disclose or suggest identifying a position by a "depth value comprising a node level value and an offset" and by a "node-in-level value comprising a node-in-level value and an offset" (Remark, page 12).

Examiner disagrees. Theisen discloses using X, Y, Z coordinates to identify positions wherein the X and Y displacement values determine the distance, and *relative offset*, between adjacent levels of nodes to be displayed (col 4, lines 49-60). Also, it would have been obvious that the X, Y, Z coordinates includes integral and non-integral numbers of positions wherein a non-integral number representing an offset of either a level value or a node-in-level value.

Regarding independent 9, applicants argue that Dolan does not disclose or suggest a container having "dimensions that change with an amount of space dynamically allocated to the node based on changing focus in the hierarchy, re-rendering the container with updated dimensions and drawing the container on the display, and without re-rendering, copying the rendered representation to a new location."

Examiner disagrees.

Dolan not only discloses *changing the icons* based on whether the children of the node represented by the icon are displayed or contain different types of children (as admitted by applicants in the remark) but also discloses *the change of dimensions with an amount of space dynamically allocated to the node* based on a changing focus in the

Art Unit: 2176

hierarchy. For example, when opening book icon 1006BL, its children 1008AL, 1008BL, 1008CL are shown (figure 11A). When closing book icon 1006AL, its children are not shown. It is easy to see the amount of space in the hierarchy is dynamically changed based on the changing focus in that hierarchy.

Therefore, re-rendering the container with updated dimensions and drawing the container on the display is performed as the change of focus is made. The copying of the rendered representation to a new location is merely the same as re-rendering of the representation when the focus changes.

Regarding independent claim 26, applicants argue that Dolan does not disclose the amended feature of fetching of information about portions of the hierarchy occurs as "a result of no user interaction other than navigation."

Examiner disagrees.

Since when clicking on a particular book icon, a user wants to find files and display files retrieved under that category, such action is a navigation. The information of the sub-hierarchy, as a result of the user's navigation, are fetched before displaying to a user (figures 8A-C). Therefore, Dolan does teach the claimed feature.

Regarding independent claim 27, applicants argue that Dolan does not disclose or suggest "determining the size of the portion of the hierarchy to be provided to the client adaptively based on parameters for optimizing communication between the server and the client."

Art Unit: 2176

Examiner agrees. However, Dolan does show the links to the nodes in the hierarchy (figure 11A-C). It would have been obvious to an ordinary skill at the time of the invention was made to have incorporated determining the size of the portion to be provided to the client based on the number of links to a specific node for displaying using various parameters depending on user's selection which is the optimizing communication between the server and the client.

Applicants argue that "claim 36 itself disclosed the feature that it claims as permitted by law" (Remark, page 8).

Claim 36 remain rejected since examiner has no idea about the law permitting for claiming the feature which is not disclosed in the specification. Also, the fact that the feature is claimed does not mean it is enabled as required under 35 U.S.C. 112, first paragraph.

Regarding independent claim 37, applicants amend the claim by adding "non-discrete" to "continuous non-discrete navigation" and argue that Dolan's interface is discrete, not continuous.

It is confusing since the amended language "continuous non-discrete navigation" can mean continuous and connected navigation. So, the rejection from the previous office action is still applied.

Claims 38-47 are dependent on claim 37, and are rejected under the same rationale.

Art Unit: 2176

Regarding claim 12, applicants argue that Kotchey does not disclose or suggest “translating *an amount of indicated* displacement in at least one of the dimensions to a rate of change of *position* in a hierarchy *corresponding to a user’s focus*” as amended in the claim.

Since the amended language:

- an amount of indicated displacement wherein the displacement is indicated as disclosed in the first part of the claim which is rejected in the previous office action, and
- “a rate of change of position in a hierarchy corresponding to a user’s focus” does not change the meaning of the limitation as before amendment which is “a rate of change of a hierarchy position used to identify a focus of user’s view of the hierarchy”

the rejection in the previous office still applies.

Applicants argue that Kotchey does not quantify the displacement of highlighting and clicking and suggest that an amount of displacement could be translate to any other value to be used for any purpose.

Examiner disagrees. The fact that Kotchey renders various views of hierarchy with different number of nodes to be displayed as in figures 2, 4, 6, 8 shows that an amount of displacement could be translated to any value to be used for any purpose as argued.

Claim 13, dependent on claim 12, is rejected under the same rationale.

Art Unit: 2176

Regarding independent claim 18, applicants argue that Seidensticker does not disclose or suggest providing "a *software* emulation of an input device" as recited in claim 18.

Examiner disagrees. Since in Seidensticker, the keypad in the user interface *imitates the real keypad* which is an input device for controlling the display, and such interface is programmed by a software, Seidensticker's keypad is a *software emulation* of an input device as claimed.

Conclusion

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cong-Lac Huynh whose telephone number is (703)-305-0432. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached on (703) 308-5186. The fax number to this Art Unit is (703) 308-5403.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Art Unit: 2176

Or faxed to:

(703) 308-9051, (for formal communications intended for entry)

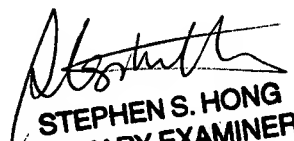
Or:

(703) 308-5403 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA. Sixth Floor (Receptionist).

CIh

4/6/01


STEPHEN S. HONG
PRIMARY EXAMINER